

Preventive maintenance measure FM41: Replacing the O-ring in the cylinder connection

Due to its exposed position at the contact area of the gas cylinder valve, the O-ring in the cylinder connection stem is one of the most critical components of the medical cylinder pressure regulator FM41. On the one hand, full cylinder pressure is always applied to this O-ring when the gas cylinder valve is open and, on the other hand, the O-ring is exposed to the environment by connecting and disconnecting the pressure regulator each time a gas cylinder is replaced. Here, there is the risk of damage or contamination. Such conditions can result in leakages or, in connection with oxygen, even in a fire.

For this reason, Spectron recommends renewing the O-ring each time a cylinder is replaced. The procedure to be followed is shown below.

1. Before starting any work, wash your hands.
Any work on components which come into contact with high-pressure oxygen must be carried out completely free from dirt, oil and grease.
2. Remove the O-ring (yellow arrow) with a suitable tool (white arrow) from its groove **without leaving any residues**.
Objects with which the base of the groove cannot be damaged can be regarded as suitable tools. Pointed objects, e.g. made from metal, are less suitable, but most commonly used. When using them, care must be taken to ensure that the respective tip cuts into the O-ring to be removed, but does not go through it! The tip must not scratch the base of the groove, because otherwise, the new O-ring would lose its sealing ability!



3. Place the new O-ring onto the groove of the cylinder connection stem and insert it fully into the groove **without** using tools. Use **only** original Spectron O-rings, as only those are approved by the manufacturer for oxygen applications!



Medical product advice:



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